

**(19) World Intellectual Property
Organization
International Bureau**



(43) International Publication Date
27 May 2004 (27.05.2004)

PCT

(10) International Publication Number
WO 2004/044205 A1

- | | |
|--|--------------------------------------|
| (51) International Patent Classification⁷: | C12N 15/29 |
| (21) International Application Number: | PCT/KR2003/002415 |
| (22) International Filing Date: | 11 November 2003 (11.11.2003) |
| (25) Filing Language: | Korean |
| (26) Publication Language: | English |
| (30) Priority Data: | |
| 10-2002-0069589 | 11 November 2002 (11.11.2002) KR |
| 10-2003-0024776 | 18 April 2003 (18.04.2003) KR |

[KR/KR]; 13-1101 Hyundai prime Apt., Guwui-dong, Gwangjin-gu, 143-761 Seoul (KR). **KIM, Mi-Jung** [KR/KR]; 467-7, Seongnae-1dong, Kangdong-gu, 134-031 Seoul (KR). **KIM, Hee-Ja** [KR/KR]; Rm.103 Daeyang Yeonrib 606-10, Shinwol2-dong, Yangcheon-gu, 158-092 Seoul (KR). **CHUNG, Chung-Han** [KR/KR]; Rm.111 Goejeong Jayu3cha Apt. 1065, Goejeong1-dong, Saha-gu, 604-081 Busan (KR). **PYEE, Jae-Ho** [KR/KR]; 1241-805 Mokryun Apt., Sanbon-dong, 435-040 Gunpo-city, Kyungki-do (KR). **HYUNG, Nam-In** [KR/KR]; 101-103 Hyundai Apt., Ssangyong-dong, 330-090 Cheonan-city, Chungcheongnam-do (KR).

- (74) Agent: LEE, Young-Pil; The Cheonghwa Building, 1571-18, Seocho-dong Seocho-gu, 137-874 Seoul (KR).

(81) Designated States (*national*): JP, US.

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

- (72) Inventors; and**
(75) Inventors/Applicants (for US only): SUH, Mi-Chung

- (54) Title:** PLANT SEED-SPECIFIC EXPRESSION PROMOTER DERIVED FROM SESAME AND SEED-SPECIFIC EXPRESSION VECTOR COMPRISING THE PROMOTER

[illegible][illegible][illegible]

(57) Abstract: Provided are a seed-specific expression promoter derived from sesame microsomal oleic acid desaturase (Si-FAD2) gene, an intron for expression enhancement, a seed-specific expression vector including the promoter and/or the intron, and a transgenic plant transformed with the seed-specific expression vector. Therefore, a useful product can be produced in a seed-specific manner or a common product in a seed can be functionally modified. Also, the promoter can be used together with the intron for expression enhancement, thereby increasing the expression level of an inserted gene in a seed. Therefore, it is very useful in development of a transgenic plant which induces large-scale expression of a foreign gene in a seed-specific manner.

WO 2004/04205 A1